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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/202,216 | 04/08/1999 | TAKAFUMI ATARASHI | Q52648 | 2612 |

7590

02/08/2006

SUGHRUE MION ZINN MACPEAK & SEAS
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WASHINGTON, DC 20037

EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT PAPER NUMBER

1615

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/202,216

Applicant(s)

ATARASHI ET AL.

Examiner

Lakshmi S. Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,9-11 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10-21-05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of RCE dated 11-9-05 and IDS dated 10-21-05 is acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-9-05 has been entered.

Claims 1-4, 6-7 and 9-16 are present in the instant application.

Claims 1-4, 6, 7, 9-11 and 13-16 are rejected under 35 U.S.C.103 (a) as being unpatentable over JP 06-093206 (JP '206, submitted on PTO-1449 dated 10-21-05) in view of US 5,424,129 to Lewis et al (Lewis).

Instant claims recite a base particle coated with three or more layers that are different from each other causing coloring of the resulting coated powder, wherein the specific gravity of the base particle is 0.1 to 0.15 and the refractive index of the layers is different from each other. Dependent claims recite that one of the layers is an inorganic metal oxide (claims 2-4).

JP '206 teaches a powder, excellent in saturation and useful as coatings, inks etc., wherein the a fine powder of iron oxide or mica is coating with two or more, up to

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six layers, thin films of titanium oxide alternating with thin films of silicon dioxide (abstract). JP teaches that the iron oxide or mica powder has a metallic luster with particle diameter 5-200 microns. JP teaches that the coated powder is chromatically powder. While JP (abstract) does not state the specific gravity and refractive index, the layers or coatings of JP are the same as that of the instant claims and hence the properties are inherent to the layers and the center particle. JP clearly teaches the limitation of claims 6 (powder is a pigment), 7 (powder is a cosmetic) and 9 (particle is a spherical particle). JP does not teach an organic layer in the coatings around particle.

Lewis teaches a composite metal oxide charge enhancing additive composition comprised of a first metal oxide forming a core particle, and a second metal oxide forming an outer layer on the first metal oxide core particle. The composition of Lewis is used as a toner or developer and comprises pigments particles and resins. Lewis teaches that coating a core particle with inorganic coatings have a disadvantage of not being able adjust the conductivity and particle surface composition (col. 3, lines 48-67). Lewis also teaches that the dispersibility and flow characteristics of the composition are affected by the agglomeration of metal oxides. In order to increase the flow and improve the synthetic yield of the toner, Lewis suggests incorporating an organic layer on the core metal oxide particle (col. 4, lines 56-67). Lewis teaches that first layer coating the particle is different from the second layer that surrounds the first layer, and further an outer layer comprising an organ silicone. The layers that are suitable for coating, including the particle sizes are listed in col. 8.

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It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use an organic material containing layers, as one the coatings surrounding the base or center particle in the composition of JP, with an expectation to improve the dispersibility and flow characteristics of the composition of JP because Lewis teaches that the resulting composition would have a better conductivity without agglomeration of the coatings. Accordingly, the composition of JP results in a chromatically bright composition as well as better conductivity.

While JP does not teach the thickness of each coating, JP teaches thin and smooth films for chromatic brightness. Accordingly, optimizing the thickness of the coating layer so as to achieve the desired brightness of the fine powder would have been obvious for on ordinary skill in the art. Further, with respect claim 7, the limitation “cosmetic” is an intended use and carries no patentable distinction.

Claim Objections

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

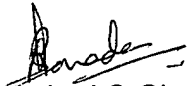
Applicant's arguments filed 10-21-05 have been fully considered but they are moot in view of the new grounds of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Lakshmi S Channavajjala
Examiner
Art Unit 1615

February 6, 2006